

Clean Water



“Water is fundamental for life and health. The human right to water is indispensable for leading a healthy life in human dignity. It is a pre-requisite to the realization of all other human rights.”

The United Nations Committee on Economic, Social and Cultural Rights, November 2002

STATEMENT OF THE PROBLEM

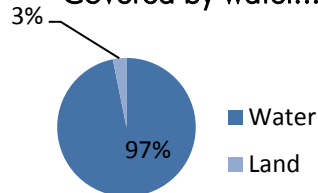
Access to clean water is an important global issue because clean water is necessary for human survival. Humans are made up of about 70% water, which means that besides oxygen, water is the most important element for the human body.ⁱ The United Nations suggests that each person requires 20-50 liters of safe, fresh water daily to cover their most basic needs of drinking, cooking, and cleaning.ⁱⁱ The use and consumption of unclean water has extremely dangerous consequences.

Unfortunately, almost a billion people worldwide do not have access to safe water. As a result, millions of people around the world—usually in developing countries—are forced to use unclean water or to go without water at all. In fact, nearly 4,000 children die each day because they do not have access to clean water or proper hygiene.

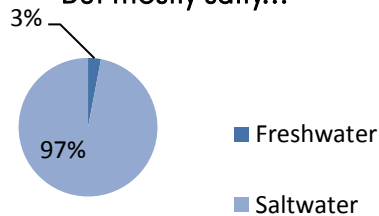
As a result of this water crisis, the United Nations, along with various other international agencies and **non-governmental organizations (NGOs)**, has sought to address the issue by building wells and latrines. However, given the magnitude of the problem, much work remains to be done.

How much of earth's water can be used for human survival?

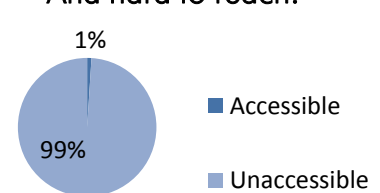
Covered by water...



But mostly salty...



And hard to reach.



HISTORY OF THE ISSUE

Water Contamination: a long history

Water has always been important throughout human history. Many ancient civilizations, such as the Egyptians, flourished because they settled near water sources, such as the Nile River. For centuries, human communities around the world unknowingly contaminated their water; societies ranging from the Ancient Romans to early Americans would send their sewage waste straight into their water sources. As a result, waterborne diseases such as cholera were rampant. In many places, animal, industrial, and human waste has been carried into rivers. The safe disposal of human and animal waste is called sanitation and is critical for improving water safety.

Accessing water today

As a result of scientific research, environmental laws, and increased public awareness, the majority of the populations of **industrialized** countries—such as the United States—have access to clean water. This is also due to the wealth of industrialized nations, who are able to build the **infrastructure** such as sewer systems, to get rid of sewage and prevent water contamination. However, many nations still do not have infrastructure to guarantee clean drinking water. Many times, sewage systems deposit human waste straight into the water supplyⁱⁱⁱ, contaminating the drinking water. In addition, sources of water—even unclean water—in many developing nations are far and few between. In Africa, for example, the average person lives 3.7 miles from the nearest water source.^{iv}



© Charity: Water

Strategies for providing access to clean water

Several strategies for providing clean water access have been identified. These are often called ‘improved drinking water sources’, and they can include such structures as wells, water piped in to homes or to a community tap, or an undisturbed spring. These ‘improved sources’ are different from those water sources which are considered ‘unimproved’: rivers, lakes, and irrigation channels.^v In addition, improving sanitation services is also critical to guarantee clean water is available.

DISCUSSION OF THE PROBLEM

WATER AND HEALTH

Industrialize: To develop business activities, including industry, factories, manufacturing plants, and modern technology

Infrastructure: The public works of a country or region, such as roads, hospitals and schools



Water is important for maintaining health and hygiene. With clean water, humans are better able to maintain a healthy diet and to control the disposal of sewage and waste.

Sanitation

Washing and bathing are important activities and people who bathe are healthier and better able to resist diseases.^{vi} Human civilizations have recognized the importance of bathing throughout history, like the Romans who built numerous public baths across Europe so that people could wash themselves and maintain good personal hygiene.^{vii}

Clean water is also important to maintain the sanitation of cities, to wash away waste and sewage. The ancient city of Mohenjo-Daro in India had drains which allowed waste and used water to flow back into the River Indus. By maintaining proper disposal of dirty water, the people of Mohenjo-Daro were able to prevent the outbreaks of disease, and to keep everyone as healthy as possible. **Bacteria and viruses** thrive in sewage, and deadly diseases can be spread from insects and **vermin** which tend to live in filthy locations and carry microscopic germs around with them.

Today, water is becoming a more and more valuable resource and some countries are suffering because they lack the water needed to provide sanitation. Rivers and lakes are either drying up, or sometimes they are so polluted with sewage and garbage that they are dangerous to bathe in and wash with. Without clean water to bathe in and to clean their homes, communities risk being overwhelmed with disgusting waste and disease.^{viii}

Diseases Spread by Dirty Water

Waste water is the perfect breeding ground for numerous dangerous diseases. Bacteria and viruses survive in water which is contaminated with waste. In fact, it is a perfect environment in which to breed. If communities do not have adequately clean water they risk catching and spreading illnesses. Human civilizations have always feared large outbreaks of these kinds of disease.

Cholera, for example, is caused by bacteria which enters the body through drinking or bathing in filthy water. These bacteria live in the intestines of humans and produce a violent and horrifying sickness that kills a large number of people around the world even today. Cholera spreads easily and is today mainly found in towns and cities which do not have adequate plumbing. There is a cure for cholera and ways of killing the bacteria in the water, but unfortunately it is expensive and impoverished people still die of cholera every day around the world.^{ix} Cholera is only one of *many* diseases which occur when people do not have clean water for sanitation, and illnesses can spread from person to person by drinking contaminated water, eating food which has been touched by insects who buzz around infected sewage or being bitten by insects that carry the bacteria inside of their own bodies.

Bacteria and Viruses: these are living things too small to be seen with the unaided eye. They are the cause of illnesses.

Vermin: rats, mice, and other similar animals which are usually considered to be pests.

Pollution in rivers also leads to diseases which are not caused by germs, but by harmful chemicals. If people know their water contains germs and have the ability to boil it, they can boil their water to kill the bacteria and viruses. This does nothing to **toxic** chemicals, which can cause painful and permanent damage to the body.^x Chemicals can be dumped into rivers by factories, mines, and other industrial buildings, causing terrible damage to the people who then drink the water or use it to clean their clothes and homes.

Infants and Children

The United Nations is very concerned about how children are affected when they do not have access to clean water. Over half the people in the developing world do not have adequate amounts of clean water, including a huge number of children.^{xi}

Children are especially vulnerable to diseases and their growth is damaged when there is no supply of clean water to drink and bathe in. For example, 1.8 million people die each year from diarrhea alone, and the vast majority of those people are children and babies.^{xii} In fact, a child dies every twenty seconds as a direct result of poor sanitation.^{xiii}

Children need water to grow and live healthily. Without clean water, children are more exposed to dangerous diseases and suffer in miserable living conditions. Nations without healthy children cannot improve their economies make the population is even more at risk from natural disasters.^{xiv}

WATER AND WOMEN AROUND THE WORLD

The issue of clean water greatly affects women and the protection of women's rights. The majority of women in the developing world are expected to stay at home to cook and clean, and so water is important to the lives of women. By improving the water situation, the UN can also help to empower women and to help girls become more independent.

Water in the Home

In areas most affected by a lack of clean water, women are the ones who have to perform most of the chores in the house. Mothers cook, clean and care for family members, and many girls have to stay at home to help run the house rather than going to school. These girls may never be able to get jobs and probably have little control over their lives because they have no education.

Girls are often the ones who have to go and collect water every day for the family. This may not seem so serious, but frequently clean water can only be found miles away. Girls will spend hours walking with heavy buckets of water instead of going to school. Girls without an education and are made to do chores do not have very many future prospects in life and will almost certainly not

Pollution: rivers become polluted when people throw their garbage into them.

Toxic: toxic chemicals are substances which are poisonous.

become independent, **empowered** women. Without an education, girls cannot learn about their rights and will remain trapped as housewives, whether they want it or not.

The Importance of Water for Good Maternal Health

Maternal health is extremely important around the world. Women who have access to medical services and nutritional food have much lower death rates giving birth than women who do not have assistance in giving birth and do not have access to clean food and water. Healthy families help to build healthy, stable societies. Unfortunately, thousands of women die around the world each year, mainly in poor and struggling countries, leaving older children without a mother^{xv}.



Mother and Child in Ethiopia
© WAHA International

Clean water is extremely important for improving maternal health. According to the UN, 1 in 6 people around the world do not have access to an adequate amount of clean water.^{xvi} Diseases spread by dirty water kill pregnant women and babies, because they are weakened and vulnerable, especially if they do not have enough to eat. Nations which cannot provide clean water to their citizens face higher maternal death rates and greater numbers of people remain in poverty.^{xvii}

If pregnant women do not have clean water, it is far more likely that they will die during childbirth. Again, in poor countries where the *majority* of maternal deaths take place, children without mothers or stable families almost never make it out of the **poverty cycle**. Their **human rights** are often not fulfilled, and the society as a whole is often **destabilized**, making it harder for the government to find the resources to improve water supplies for the country. Clean water is vital for maintaining strong families and productive societies.

WATER AND EDUCATION

Water is so important to humanity, that it even effects the education of children. If schools do not have proper toilets or water supplies, the quality of education is damaged. The UN has already decided that children have a right to basic sanitary facilities.

There is also a proven link between better water facilities and better educational performance in schools.^{xviii} Obviously, children perform better if they have access to safe drinking water and are not afflicted with diseases like cholera and various types of **parasitic worms**. Often, children have to

Empower: giving someone complete control over their decisions and lives

Poverty Cycle: Lack of education and opportunities leads to generation after generation living in poverty

Human Rights: basic freedoms all human beings are entitled too

Destabilize: when a government is incapable of functioning properly

Parasitic Worms: worms which live inside other animals and eat the food they swallow.

go to school in dirty classrooms which are not healthy for people to be inside. When there is clean water and suitable sanitation, children can learn more and do not get sick and miss school.

By improving water and hygiene in schools, we can teach children better hygiene habits, like the importance of washing hands. Studies have found that by improving water quality and plumbing facilities, it is possible to dramatically reduce the number of diseases and death amongst children.^{xix}

Education is the key to solving global poverty. Children who receive an education are more productive citizens and manage to get higher paying jobs.^{xx} Improving water quality and sanitation have an enormous impact of schools, and in this way water is linked with children's futures.^{xxi}

Unfortunately, girls are most affected by water problems in schools.^{xxii} If a family has to walk miles each day to collect water, it is mostly girls who have to drop out of school and travel long distances to bring back water.^{xxiii} Girls are more likely to have to miss school to perform household tasks, like cleaning and taking care of sick family members.^{xxiv} Girls have a better chance of coming to school if there is water near to their homes and there are separate, clean female bathrooms at school as well.^{xxv} Girls who do not attend school, especially if they are kept at home doing chores and collecting water, cannot get careers later in life and remain trapped in poverty.

Clean water is vital for improving education around the world and providing a future for children. Without access to clean water, children are prevented from getting a good education. Girls especially are prevented from escaping poverty by water issues which keep them from going to school.



A young girl carrying water in India

© Telegraph UK

WATER AND THE ECONOMY

Water is vital for maintaining growing economies. Water generates electricity that is needed to power factories, irrigate crops, and transport goods. Early human civilizations used canals to improve irrigation of crops that were miles away from the nearest river. In ancient times, water made the growth of civilizations possible and today water is just as important for modern nations. Countries with limited ability to control water for agriculture and electricity find it extremely difficult to grow their own economies or to provide enough food for their citizens.

How is Water Used?

There are three main uses of fresh water. According to the official UN agency responsible for overseeing the use of water, only 8% of all water is used for drinking, cooking and bathing.^{xxvi} 22% is used in industry, powering electricity and helping factories to make products.^{xxvii} But the largest use of water, 70%, is used in agriculture to water plants.^{xxviii} This was how most water was used in

ancient societies, and even today we continue to use most of our water irrigating crops. In fact, the UN estimates that we are using water so quickly, that by 2025 two-thirds of the world's^{xxx} population will be experiencing water shortages.^{xxx}

The Amount of Water Used to Make Food

Although on average a person only uses half a gallon of water to drink a day, it takes between 528 and 1320 gallons to produce the amount of food eaten by the average person each day.^{xxxi} Plants require less water to produce food than animals, and the increasing consumption of meat means that even more water is being used. For example, to produce a single kilogram (about 2 pounds) of rice, it takes over 500 gallons of water. But to produce a single kilogram of beef, it takes over 3500 gallons of water.^{xxxii}

Water Used in Industry

Water is used in factories to help process, wash, dilute and cool products. In fact, every single manufactured item has been created with water.^{xxxiii} Industries around the world use an enormous amount of water to create and sell products, which drives the economy of the nation. Most water used in manufacturing is fresh water, meaning that it has come from either rivers or lakes.^{xxxiv}

The industries which use water the most are factories producing paper, chemicals and oil refineries. Paper is made from wood, and needs vast amounts of water to make the woodchips squishy enough to press into paper. Chemical plants need water to mix together solutions, everything from fertilizers to ingredients in medicines. Oil must be turned into gasoline before it can be used inside of cars, buses and airplanes in a process called “refining.”

Industry takes up a huge amount of water. For example, in the US state Louisiana uses approximately 2.6 **billion** gallons of fresh water *a day* just to make paper and chemicals.^{xxxv} Nations need clean water to run factories and to sell things on the global market. Without access to enough water, nations will have huge difficulties in growing their economies. It isn't a coincidence that the world's poorest nations are also those with the least amount of water.

PAST INTERNATIONAL ACTIONS

The Millennium Development Goals

The most significant international action regarding the water crisis has been the inclusion of the issue in the **Millennium Development Goals**. In September 2000, at the Millennium Summit in New York, heads of state met to set objectives for improving the world in the new century; these objectives were called the *Millennium Declaration*. One of the target's of Goal number 7 (Ensure Environmental Sustainability) is to: “Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.”^{xxxvi} The most significant progress

Millennium Development Goals: Eight development-related goals that all the member states of the United Nations are aiming to achieve by 2015

regarding clean water has been made in East Asia, where 400 million people have gained access to clean water.^{xxxvii} However, much work still remains; 1.2 billion people worldwide still do not have access to clean water.^{xxxviii}

Role of Non-Governmental Organizations (NGOs)

Efforts to improve water issues in developing countries typically have been organized by the United Nations and by NGOs, who often have the resources to help when governments do not provide these resources. NGO programs range from providing education and simple water purification systems to building water access and sanitation infrastructure, such as wells and latrines. The construction of wells is efficient because it provides water for many people and removes the pressure from people, especially women and children, to walk for miles to the nearest water source. As a result, more children are able to go to school and more adults are able to spend time on agriculture or other business activities. Education programs are also helpful because they help create awareness about sanitation, and teach about the direct link between dirty water and disease. Once people are equipped with this knowledge, they are much less likely to become sick.

QUESTIONS TO CONSIDER

This committee must consider what is to be done to improve clean water access for the 2.5 billion people who are believed to be without clean water.¹ The UN must consider,

- How is water important to economies?
- How important is water for food?
- How can improving water quality improve maternal health?
- How does water effect human health?
- How does improving water improve education?

BLOC POSITIONS

Western Europe and Other

In the developed world, everyone has access to clean water and sanitation. The governments of the developed world make delivering water and sanitation services to all citizens a priority, and the citizens of those nations see access to clean water and sanitation as a basic right. Western Europe and Other nations are also a main source of monetary aid for the developing world, and some of that aid money is dedicated to water and sanitation projects.

Eastern Europe

Eastern Europe is similar to Western Europe and other developed nations in their ability to provide access to both clean water supplies and sanitation services. The governments of Eastern Europe have built the necessary water infrastructure to give all their citizens access to safe water. There are only two exceptions: Romania and Moldova. The governments of Romania and Moldova struggle to provide any social services, including water access and sanitation services, due to lack of funds.

Africa

In most of the countries of Africa, access to clean water is not available. Due to poor economies and unstable governments, many African nations do not provide the majority of their citizens with water and sanitation services, so they are left to find their own water sources. Water-born disease rates are very high in Africa because many people rely on contaminated water sources for their survival. Recently, many non-governmental organizations have started water infrastructure projects in several African countries, to make accessing safe water sources easier and safer for all Africans.

Asia

Asia is a mixed bag when it comes to safe water accessibility. Some nations, like Malaysia and the Republic of Korea, are able to provide every citizen with access to clean water and sanitation services due to their recent economic growth. But, many Asian nations do not provide government sponsored water infrastructure, so the citizens have to rely on unsafe water sources.

Middle East

Overall, the countries of the Middle East have decent access to clean water throughout government supported water infrastructure projects. But, water scarcity is an issue in the region, due to the fact that the climate throughout the Middle East is desert and has limited fresh water sources to access. The countries of the Middle East are concerned that their limited water supply will become even more stressed in the future.

Latin America and the Caribbean

Like Asia, Latin America and the Caribbean have varying degrees of clean water access and sanitation services. Most of the region has access to clean water supplies regulated by the government, although in the poorer nations, many of the citizens are unable to afford the government-controlled water systems. And many nations in Latin America and the Caribbean do not provide sanitation services or provide inadequate services to all their citizens.

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